

CHAPTER 2 – REVIEWING FINANCIAL STATEMENTS

Questions

- LG1 1. List and describe the four major financial statements.

The four basic financial statements are:

1. The **balance sheet** reports a firm's assets, liabilities, and equity at a particular point in time.
2. The **income statement** shows the total revenues that a firm earns and the total expenses the firm incurs to generate those revenues over a specific period of time—generally one year.
3. The **statement of cash flows** shows the firm's cash flows over a given period of time. This statement reports the amounts of cash that the firm generated and distributed during a particular time period. The bottom line on the statement of cash flows—the difference between cash sources and uses—equals the change in cash on the firm's balance sheet from the previous year's cash account balance.
4. The **statement of retained earnings** provides additional details about changes in retained earnings during a reporting period. This financial statement reconciles net income earned during a given period and any cash dividends paid within that period on one side with the change in retained earnings between the beginning and ending of the period on the other side.

- LG1 2. On which of the four major financial statements (balance sheet, income statement, statement of cash flows, or statement of retained earnings) would you find the following items?

- a. earnings before taxes - income statement
- b. net plant and equipment - balance sheet
- c. increase in fixed assets - statement of cash flows
- d. gross profits - income statement
- e. balance of retained earnings, December 31, 20xx - statement of retained earnings
- f. common stock and paid-in surplus - balance sheet
- g. net cash flow from investing activities - statement of cash flows
- h. accrued wages and taxes - income statement
- i. increase in inventory - statement of cash flows

- LG1 3. What is the difference between current liabilities and long-term debt?

Current liabilities constitute the firm's obligations due within one year, including accrued wages and taxes, accounts payable, and notes payable. Long-term debt includes long-term loans and bonds with maturities of more than one year.

- LG1 4. How does the choice of accounting method used to record fixed asset depreciation affect management of the balance sheet?

Firm managers can choose the accounting method they use to record depreciation against their fixed assets. Two choices include the straight-line method and the modified accelerated cost recovery system (MACRS). Companies often calculate depreciation using MACRS when they figure the firm's taxes and the straight-line method when reporting income to the firm's stockholders. The MACRS method accelerates depreciation, which results in higher depreciation expenses, lower taxable income, and lower taxes in the early years of a project's life. The straight-line method results in lower depreciation expenses, but also results in higher taxes in the early years of a project's life. Firms seeking to lower their cash outflows from tax payments will favor the MACRS depreciation method.

LG1 5. What are the costs and benefits of holding liquid securities on a firm's balance sheet?

The more liquid assets a firm holds, the less likely the firm will be to experience financial distress. However, liquid assets generate no profits for a firm. For example, cash is the most liquid of all assets, but it earns no return for the firm. In contrast, fixed assets are illiquid, but provide the means to generate revenue. Thus, managers must consider the trade-off between the advantages of liquidity on the balance sheet and the disadvantages of having money sit idle rather than generating profits.

LG2 6. Why can the book value and market value of a firm differ?

A firm's balance sheet shows its book (or historical cost) value based on Generally Accepted Accounting Principles (GAAP). Under GAAP, assets appear on the balance sheet at what the firm paid for them, regardless of what assets might be worth today if the firm were to sell them. Inflation and market forces make many assets worth more now than they were when the firm bought them. So in most cases, book values differ widely from the market values for the same assets—the amount that the assets would fetch if the firm actually sold them. For the firm's current assets—those that mature within a year—the book value and market value of any particular asset will remain very close. For example, the balance sheet lists cash and marketable securities at their market value. Similarly, firms acquire accounts receivable and inventory and then convert these short-term assets into cash fairly quickly, so these assets' book value is generally close to their market value.

LG2 7. From a firm manager's or investor's point of view, which is more important—the book value of a firm or the market value of the firm?

Balance sheet assets are listed at historical cost. Managers would thus see little relation between the total asset value listed on the balance sheet and the current market value of the firm's assets. Similarly, the stockowners' equity listed on the balance sheet generally differs from the true market value of the equity—in this case, the market value may be higher or lower than the value listed on the firm's accounting books. So financial managers and investors often find that balance sheet values are not always the most relevant numbers.

LG3 8. What do we mean by a "progressive" tax structure?

The U.S. tax structure is progressive, meaning that the larger the income, the higher the taxes assessed. However, corporate tax rates do not increase in any kind of linear way based on this progressive nature: They rise from a low of 15 percent to a high of 39 percent, then drop to 34 percent, rise to 38 percent, and finally drop to 35 percent.

LG3 2-9 What's the difference between an average tax rate and a marginal tax rate?

You can figure the average tax rate as the percentage of each dollar of taxable income that the firm pays in taxes. From your economics classes, you can probably guess that the firm's marginal tax rate is the amount of additional taxes a firm must pay out for every additional dollar of taxable income it earns.

LG3 2-10 How does the payment of interest on debt affect the amount of taxes the firm must pay?

Corporate interest payments appear on the balance sheet as an expense item, so we deduct interest payments from operating income when the firm calculates taxable income. But, any dividends paid by corporations to their shareholders are not tax deductible. This is one factor that encourages managers to finance projects with debt financing rather than to sell more stock. Suppose one firm uses mainly debt financing and another firm, with identical operations, uses mainly equity financing. The equity-financed firm will have very little interest expense to deduct for tax purposes. Thus, it will have higher taxable income and pay more taxes than the debt-financed firm. The debt-financed firm will pay fewer taxes and be able to pay more of its operating income to asset funders, i.e., its bondholders and stockholders. So even stockholders prefer that firms finance assets primarily with debt rather than with stock.

LG4 2-11 The income statement is prepared using GAAP. How does this affect the reported revenue and expense measures listed on the balance sheet?

Company accountants must prepare firm income statements following GAAP principles. GAAP procedures require that the firm recognize revenue at the time of sale, but sometimes the company receives the cash before or after the time of sale. Likewise, GAAP counsels the firm to show production and other expenses on the balance sheet as the sales of those goods take place. So production and other expenses associated with a particular product's sale only appear on the income statement (for example, cost of goods sold and depreciation) when that product sells. Of course, just as with the revenue recognition, actual cash outflows incurred with production may occur at a very different point in time—usually much earlier than GAAP principles allow the firm to formally recognize the expenses. Further, income statements contain several non-cash entries; the largest of these non-cash entries is depreciation. Depreciation attempts to capture the non-cash expense incurred as fixed assets deteriorate from the time of purchase to the point when those assets must be replaced. Let's illustrate the effect of depreciation: Suppose a firm purchases a machine for \$100,000. The machine has an expected life of five years and at the end of those five years, the machine will have no expected salvage value. The firm lays out a \$100,000 cash outflow at the time of purchase. But the entire \$100,000